REMARKS

Claims 38, 39, 41-54, and 56-68 are currently pending. Claims 40 and 55 have been canceled and claims 38, 39, 41-54, and 56-68 have been amended.

The Examiner objected to the specification for the use of the term "levigating". Applicants have amended the paragraph to replace the term "levigating" with the phrase "mixing and milling. In view of these amendments, Applicants respectfully request the withdrawal of this objection.

The Examiner rejected claims 38-68 under 35 U.S.C. §112, second paragraph for several informalities, typographical errors, and use of certain terms.

Applicants have amended the claims to remove all parenthesis and quotation marks as suggested by the Examiner. In addition, Applicants have corrected the typographical errors and spelling errors noted by the Examiner. Uses of the phrase "selected from" have been amended to recite "selected from the group consisting of" as suggested by the Examiner. Furthermore, the phrases "given amount" and "a small amount" have been removed as suggested by the Examiner. In claims that refer to "high temperature", Applicants have added the temperature range.

Applicants have amended "regulating agent" to further recite a regulating agent for regulating the setting time and working characteristics. While this is similar to a retarder, it is not identical. Regulating agent should be interpreted as including retarders and other agents that regulate the setting time and/or working characteristics.

Applicants have not amended "strong alkali" or "strong alkali salt" as Applicants believe these terms are well-known in chemistry fields and would be understood by one of ordinary skill in the art.

In light of the foregoing, and the amendments made to the claims, Applicants have traversed the 35 U.S.C. §112 rejections.

The Examiner rejected claims 38-68 under 35 U.S.C. §103(a) as being unpatentable over Zhu (U.S. Patent No. 6,468,345), Fondriest (U.S. Patent No. 4,174,974), Fuchigami (Japanese Pub. No. JP 0483744, or Novak (Canadian Patent No. CA2,324,486) alone or in view of Rae (U.S. Patent No. 5,447,197).

Applicants respectfully disagree with the Examiner's interpretation of the references. Applicants contend these references disclose several kinds of composite cements and cement clinkers or cement mixes for being added to the composite cements, which is significantly different from the sialite binary wet cement recited in amended claim 38 of the present invention.

In the cited prior art references, "one component" composite cements and cement clinkers or cement mixes are disclosed. The "one component" refers to one-pot or one-package.

As mentioned in the specification of the present invention, the "one component" composite cements and cement clinkers or cement mixes have been used in the prior art. However, the sialite binary wet cement of the present invention is composed of two components-- "female body" as a primary component and "male body" as a secondary component, and is different from the "one component" composite cements and cement clinkers or cement mixes. In the sialite binary wet cement of the present invention, industrial waste slag is the main components for providing strength. The primary component is slurry, paste or wet powder composed of inorganic cementitious materials, together with regulating agents and water. The inorganic cementitious materials have a fineness degree which results

in a specific surface area of 2800-7500cm2/g. The primary component exists always in a wet form throughout each of the manufacturing, storing, transporting and using processes and thus avoids causing dust. Its secondary component exists in a wet form or a dry powder form. The "female body" and the "male body" must be produced, stored and transported separately, and cannot be mixed together before they are used. The "female body" slurry and "male body" slurry do not solidify when stored separately. When mixing the "male body" together with the "female body", the "male body" excites the activity of the "female body" and in the meantime will take part in reactions and accordingly cause interactions, and chemical reactions (including liquid phase reaction, solid phase reaction) so as to form concreting product (including crystal, concreting, net-work or mixtures thereof), and finally form a sialite having very high strength. Namely, the sialite binary wet cement has a hydration mechanism different from that of "one component" composite cements and cement clinkers or cement mixes.

In addition, the binary wet cement of the present invention uses solid waste slag as the main body of the cemetitious materials, and the industrial waste slags are the main part for imparting cement strength. In the prior art references, some composite materials are added to the composite cements for playing merely a role of second hydration, but not major elements of hydration, or for improving cement properties and to adjust cement grades. The industrial waste slags used in the composite cements as composite material replace a part of cement clinker merely, and cement clinker still constitutes considerable proportions of the cement, and thus it is the main part for imparting cement strength. This is an essential difference between the traditional composite cements and the binary wet cement of the present invention.

Furthermore, the "female body" and "male body" of the sialite binary wet cement of the present invention have very slow hydration before they are mixed together, and thus they can be stored for a long period without a reduction of quality. Therefore, it is very convenient for storing, transporting and using the "female body" and "male body" of the sialite binary wet cement of the present invention. In contrast, the prior art "one component" composite cements and cements are apt to agglomerate, and thus to reduce or loss its cementing capacity, and as a result, its strength is reduced significantly. Even if under a good storage condition, the prior art "one component" composite cements and cements cannot be stored for a long time, since the cement will absorb moisture and carbon dioxide from the air, and accordingly retard hydration and cause carbonization, thereby its cementing capacity is lost and strength is largely reduced.

Furthermore, the production process of the sialite binary wet cement is different from that of the prior art "one component" composite cements and cements, and the basic difference is that the crushing and milling of the starting materials are conducted in water medium, but not in air, and the manufacture is finished in a wet state (slurry, paste, wet powder). The process is quite flexible, for example, the starting materials are wet-crushed and wet-milled respectively, then mixed and homogenized according to proportioning ratio, or alternatively the starting materials are formulated respectively according to grindability, then wet-crushed and wet-milled, finally mixed and homogenized to obtain slurry and paste which do not need further dry treatment, namely these are the obtained products. They can be used to manufacture concrete immediately or be packaged in bags for storage and transportation for further usage.

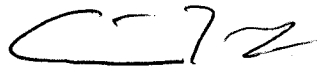
In light of the foregoing, Zhu, Fondriest, Fuchigami, Novak, and Rae, alone or in combination, do not teach or suggest each and every limitation of claim 38. As such, claim 38 is allowable. In addition, claims 39, 41-54, and 56-68 depend from claim 38 and are allowable for these and other reasons.

CONCLUSION

In light of the foregoing, Applicants respectfully submit that claims 38, 39, 41-54, and 56-68 are allowable.

The undersigned is available for telephone consultation during normal business hours.

Respectfully submitted,



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